

DNR Air Quality Bureau
Iowa Department of Natural Resources
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Urbandale, IA 50322



Regulate Asbestos?



When asbestos containing material is disturbed, microscopic fibers are released. These fibers can remain airborne almost indefinitely and can travel great distances. If inhaled they can become permanently lodged in our bodies and pose a serious health threat as exposure to asbestos is known to cause disease and cancers, although symptoms may not appear for up to 20 or more years after exposure.

There is no known safe level of asbestos exposure. The Iowa Department of Natural Resources is responsible for implementing those portions of the Clean Air Act that protect the outside air from asbestos during facility renovation and demolition. However, indoor air and asbestos worker protection is regulated by OSHA, not DNR.

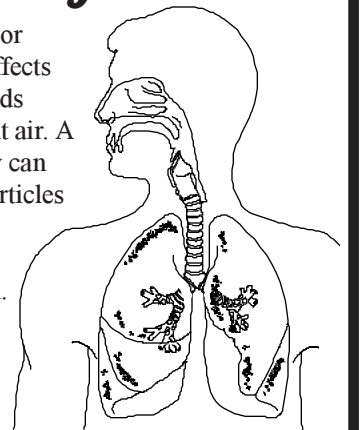
Until 1978, asbestos building materials were widely used in fireproofing, thermal and acoustical insulation, condensation control and decoration. Asbestos has been used in over 3,000 commercial products. Between 1900 and 1980, approximately 30 million tons of asbestos were used in building materials. Although the prevalent use of asbestos in commercial products occurred from the 1940's to the 1970's, asbestos-containing building materials was still sold as late as the early 1990's.

Because of its widespread use, protecting the public from asbestos exposure is everyone's responsibility.

To learn what regulations apply, often even *before* a facility is renovated or demolished, see inside.

Diseases Caused by Asbestos

Improper containment, removal or handling of asbestos materials affects workers, and potentially thousands downwind that breathe the ambient air. A contaminated worker or passerby can easily carry home microscopic particles on skin, clothes and shoes to expose family members. This is especially dangerous for children.



Mesothelioma — a cancer of thin membranes that line the chest and abdomen. It rarely occurs in people not exposed to asbestos. It is always fatal.

Asbestosis — a chronic lung disease known to scar lung tissue, create breathing difficulty, shortness of breath and reduced lung capacity. Lung damage is permanent and leads to increased risk of dangerous lung infections. Asbestosis can be fatal.

Other Cancers — breathing invisible or visible asbestos particles can cause cancer. Fibers not deeply imbedded in lung tissue are removed by tiny hairs, travel up the throat in mucous and are swallowed. As such, cancer can also form in the larynx, esophagus, stomach, intestines and rectum.



Improperly stored asbestos tiles. Asbestos must be adequately wet to prevent fiber release, stored wet in properly sealed bags with a proper waste label.

Who is Subject to Asbestos Regulations?

The Iowa Department of Natural Resources protects the outside air from asbestos contamination under the Clean Air Act. The Act specifies National Emission Standards for Hazardous Air Pollutants (NESHAPS) that includes asbestos. Indoor air and worker protection is regulated by OSHA, not DNR.

1. Who is Subject?

Facilities are subject. Facilities are any institutional, commercial, public or industrial installations or buildings, including ships and active or inactive waste disposal sites.

Also subject are residential buildings demolished or renovated as part of a commercial, public, industrial or institutional project.

A few examples include demolishing residential houses for construction of roads, parking lots, apartments, commercial buildings or the demolishing of flood damaged homes as a FEMA project. However, residential buildings with four or fewer dwelling units demolished for purposes other than commercial, public, industrial or institutional are exempt. For example, a family demolishing their own house to rebuild or remodel is exempt.

In addition, facilities previously subject to the asbestos NESHAP are not excluded, regardless of current use, ownership, or function.

2. When do the Regulations Apply?

Asbestos containing materials are dangerous only if damaged or dis-

turbed. To protect human health, regulations often apply before renovation and demolition projects begin. Asbestos regulations are designed to prevent significant public exposure to airborne asbestos during renovation or demolition work. Because asbestos fibers can be microscopic, stay aloft almost indefinitely and travel great distances, asbestos regulations must be closely followed and enforced to protect the health of Iowans.

3. Inspect to See What Contains Asbestos

Before renovation or demolition, a thorough asbestos inspection is required. Small renovation projects well below the thresholds do not require inspection. (see item 4.) Inspections may be facility-wide or only for areas where renovation or demolition work occurs. All renovations and demolitions are subject to the regulation insofar as the owners and operators must determine if and how much asbestos is present at the site.

"Thorough inspection" means all suspect asbestos-containing materi-

als require sampling and laboratory analysis or are assumed to contain asbestos and handled in accordance with the regulation. Suspect asbestos-containing materials include floor tile, linoleum, pipe and boiler insulation, heat duct wrap and joint tape, cementitious, transite or slate siding and roofing, asphalt-based roofing and asphalt shingles, ceiling tiles, joint compound, sprayed-on acoustical, decorative texturing and other materials.

The inspector must have a thorough knowledge of asbestos, know sampling techniques and be familiar with all asbestos regulations.

4. Post Inspection

After thorough inspection, observe the following:

Demolitions: All facility demolitions require submission of a complete, timely and accurate two-page demolition notification form to DNR — even if no asbestos is found.

Only certain notification procedures apply for combined regulated asbestos containing material (RACM) below 160 square feet of surfacing, 260 linear feet of pipes, or 35 cubic feet of debris. As al-

ways, consult the actual regulation.

For demolitions ordered by state or local governments to prevent imminent collapse of unsound facilities, only certain notification, emission control, and waste disposal procedures apply if the combined amount of RACM is at least 160 square feet, 260 linear feet, or 35 cubic feet.

Renovations: All notification, emission control, and waste disposal procedures apply if the combined amount of regulated asbestos-containing material (RACM) meets or exceeds any of the following thresholds: 160 square feet of surfacing, 260 linear feet of pipes, or 35 cubic feet of debris. A renovation notification form must be submitted to DNR if RACM amounts meet or exceed these thresholds. No renovation procedures apply if the combined amount of RACM is below these amounts, or if tested material contains less than one percent asbestos.

Depending upon the category and condition of the material, renovation procedures may not apply. As always, consult the actual regulation.

5. RACM Adds UP!!

Combined amounts of Regulated Asbestos Containing Material (RACM) are cumulative for a calendar year. If several projects are conducted at the same facility during a year, once the minimum RACM quantities are met, all notification, emission control, and waste disposal procedures apply. Reducing large asbestos removal projects into smaller segments to circumvent regulations is prohibited.

6. Take Ten!!

Upon postdate of submitted renovation or demolition notification forms, ten working days must pass

before any disturbance of asbestos containing material takes place. This allows DNR inspectors time to ensure initial asbestos testing by contractors was thorough.

7. How is Asbestos Removed?

Before demolition or renovation occurs, asbestos containing materials must be removed. By regulation, an on site supervisor or foreman trained in NESHAP regulations and capable with the means to comply with them must be present.

Strict regulations are designed to prevent and contain microscopic asbestos fiber release during removal. The material must be adequately wet to prevent dust, contained in an air-tight, sealed area and disposed of following strict guidelines. Upon completion, the contractor must take air samples to determine if the inside air is clean before opening the contained area. Once open, building owners can check the area with a flashlight. If any dust or debris is present — even asbestos matter the size of sand grains or visible dust — a work practice violation can occur.

8. Safety Through Compliance — What about Fines?

If a DNR inspector finds workplace violations, penalties can follow. Regulations view both the



facility owner and contractor accountable. Work practice violations are generally most serious as asbestos emissions can occur. Remember asbestos can kill and regulations are designed to protect all Iowans from exposure.

Failure to notify DNR of renovation and demolition projects is also a violation. The form must be filled out completely and accurately. Even failing to put the correct facility address can result in a violation. Correct information is used to ensure regulations are followed via on-site inspection.

Violations can result in written notices, fines or other action including civil penalties.

Since 1992, DNR has conducted over 500 inspections. One third of these were follow-ups to public complaint, the rest were routine inspections.

For More Information

Asbestos NESHAP questions?

Call the DNR Air Quality Bureau at 515-281-8443 or email mburnsi@max.state.ia.us

For notification forms or regulation copies

Call the DNR air quality office at 515-242-5100

For asbestos contractor certification permits

Call the Iowa Division of Labor at 515-281-6175

(Any business or individual compensated to remove asbestos containing materials is required by the Iowa Division of Labor to obtain a certified asbestos contractor permit)

For asbestos OSHA questions

Call the Iowa Division of Labor at 515-281-3606

For AHERA (Asbestos Hazard Emergency Response Act) questions

Call the EPA at (913) 551-7602

Policies and statements in this brochure are intended solely as guidance, cannot be used to bind the agency, and is not a substitute for reading applicable statutes and regulations.

NESHAP sections for demolition and renovation operations are found in the Code of Federal Regulations (40CFR61.145) (inspection, notification, emission control) and 40CFR1.150 (waste disposal).